



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/623,450

07/21/2003

Chang-Ming Yang

003-03-017

5024

7590

11/15/2006

Apex Juris, pllc
13194 Edgewater Lane Northeast
Seattle, WA 98125

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/623,450	Applicant(s) YANG, CHANG-MING	
	Examiner Julie Lieu	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 12-25 is/are allowed.
- 6) ☐ Claim(s) 11 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to Applicant's amendment file November 25, 2005.

Claims 2, 15, and 18 have been amended.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to disclose that the sensor can sense the metal or magnetic material by the material touching the sensor, which is the CCD image device. Further, it also fails to disclose how an image of an object can indicate that the object is of metal or magnetic material.

Art Unit: 2612

In addition, the specification fails to disclose how a capacitance sensor senses the “sharpness” of the metal or magnetic material.

5. Claims 11 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, it is not clear how the metal or magnetic material can be sensed by it touching the sensor, which is the CCD image device?

In claim 26, it is not clear how the capacitance sensor can sense the “sharpness” of the metal or magnetic material, and how the metal or magnetic material’s location is detected based on the capacitance value that depends on the metal or magnetic material’s sharpness.

Allowable Subject Matter

6. Claims 1-10 and 12-25 allowed.

7. Claims 11 and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's Arguments

8. Applicant has presented the following arguments:

Argument 1:

"First, neither the specification nor the claims states that the sensor can sense the metal or magnetic material by the material touching against the CCD image device. The image device is to record an image and therefore nothing ever touches the CCD. The Applicant states in the specification, the sensor 1 can contain both a thermal sensor 15 and a CCD image device 14."

Argument 2:

"Next, the Examiner states that the specification fails to disclose 'how the microprocessor is capable to determine that the material is a metal or magnetic material by comparing the image information and the database.'" The specification states that the CCD sensor is able to detect metal or magnetic material and this sensor then sends the detected result to the microprocessor. Here, the information is stored with information in the database. It is obvious to one skilled in the art that the database must contain information that is comparable to the detected metal or magnetic material. Further, it is obvious from the specification description that if the CCD is detecting various types of metals and then compares them with something in the database that the data in the database must be various types of metals. With respect to how the microprocessor determines if it is metal or magnetic material, it is

Art Unit: 2612

obvious that if the image submitted by the CCD sensor is comparable to the stored data then the microprocessor will send out a warning.

Argument 3:

“Finally, the Examiner states that the specification fails to disclose how a capacitance sensor senses the sharpness of the metal or magnetic material. Actually, the specification does not state that the capacitance sensor senses the ‘sharpness’ of the metal or magnetic material. What it says is that there is ‘a capacitance sensor that shows capacitance values depending on the sharpness or distance of the metal or magnetic material when any metal or magnetic material exists, so as to detect the location of the metal or magnetic material.’ Therefore, the sensor will show a capacitance value based on the sharpness of the metal, or based on the distance to the metal or magnetic material. The sensor does not actually sense the degree of sharpness.”

Applicant's Arguments

9. Applicant's arguments have been fully considered but they are not persuasive.

Response to argument 1:

The 112, 1st paragraph rejection is now addressed to claim 11 instead of claim 10, wherein the claim 11 recites that the sensor is a CCD image device. The specification fails to disclose how this could be done with the CCD image device; therefore the rejection still applies.

Art Unit: 2612

Response to argument 2:

The Examiner intended to state that how a metal or magnetic “material” can be recognized by the image. Therefore, the argument is moot and the rejection has been rephrased as above.

Response to argument 3:

The claims clearly recites that a capacitance sensor that shows capacitance values depending on metal material’s sharpness. This clearly says it senses the sharpness of the material. Note that the word “or” is used; therefore, the claim could be interpreted as either one of the two items included in the OR operator.

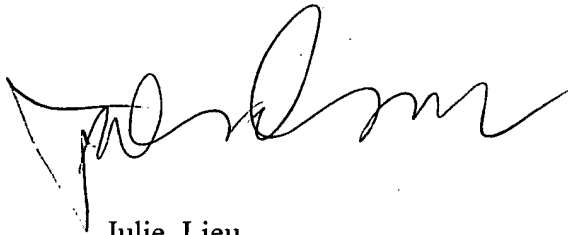
For reasons stated above, the rejection is maintained.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', is positioned above the printed name and title.

Julie Lieu
Primary Examiner
Art Unit 2612

Nov 02, 06